

Work Order ID 150671

Monday, August 29, 2016 2:58:17 PM

150671

Page 1

Item ID: 646.4001 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: AS350 Cable Cutter System
Start Date: 8/22/2016 Start Qty: 1.00 ***1*** Cust Item ID:
Required Date: 8/29/2016 Req'd Qty: 1.00 ***1*** Customer:
Reference:

Approvals: Process Plan: **DAS 21 9-89** Date: **AUG 30 2016** Tooling: Date: Run Start ***NR1***
QC: Date: SPC (Y/N): Date: Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
646.4000	C1	DAS 6 9-89					DAS 21 9-89	16-09-14	

100 Document Control 0.00
100 DOCUMENT CONTROL
DC Memo 0.00
Doc.Control -USB or Paperwork Photocopy bluefile & type labels per PPP 646.4001

110 Pick Kit 0.00
110
Packaging Memo 0.00
Packaging

120 QC4- 100% Inspect kits for completeness 0.00
120
QC Memo 0.00
Quality Control

DAS 27 9-89
16/9/26
SEP 13 2016
SEP 19 2016
DAS 27 9-89
16/9/26

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval	
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐			
Design ☐	☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐			
Doc/Data ☐	☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐			
Equip/Tooling ☐	☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐			
Handling/Pre ☐	☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐			
Material ☐	☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐			
Internal Transport ☐	☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐			
Tribal Knowledge ☐	☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐			
LOA ☐	☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐			
Substation ☐	☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐			
Past Expiry Date ☐	☐	Manufacturing Process ☐	OTHER : _____						
Misidentified ☐	☐	Past Due ☐							

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Page 2

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QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Packaging	0.00							
130						DAS 27 9-89			
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPP 646.4001 Location: <u>fg 101</u>								
140	QC21- Final Inspection - Work Order Release	0.00							
140						DAS 21 9-89			SEP 2 6 2016
QC	Memo	0.02							
Quality Control									

DAS
21
9-89

SEP 2 6 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

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Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
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				QC / QA Coordinator Approval	
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Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____					

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Page 1

Work Order ID: 150671

150671

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 8/22/2016

Required Date: 8/29/2016

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP REV:A 12.10.23 NEW ISSUE DD VERF:JLM
IPP REV:B 15.01.08 AS PER DWG REV.B DD VERF:JLM IPP
REV:C 16.01.07 AS PER DWG REV.C DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

600.0129		Purchased	No			100	f	88.0000	8	8			
600 0129									**				
VHB TAPE 75935A651													

				Location	Loc Qty	Loc Code							
				CCK095	88								
				m127920	88								
600.0990		Purchased	No			100	Each	23.0000	1	1			
600 0990									**				
Magnabond 6398 Part A Size 112 ml													

				Location	Loc Qty	Loc Code							
				CA2	11								
				M135213	11								
				PKG	12								
				M134167	1								
				M134249	11								
600.0991		Purchased	No			100	Each	22.0000	1	1			
600 0991									**				
Magnabond 6398 Part B Size 112 ml													

				Location	Loc Qty	Loc Code
				CA2	11	
				m135213	11	
				PKG	11	
				m134167	1	
				m134249	10	

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Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
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Root Cause		FAULT CATEGORY			
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐
Past Expiry Date ☐	Manufacturing Process ☐				
Misidentified ☐	Past Due ☐				
		OTHER :			

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Page 2

Work Order ID: 150671

150671

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 8/22/2016

Required Date: 8/29/2016

Start Qty: 1.00

Required Qty: 1.00

600.1012 Purchased No

100 Each

12.0000

1

600 1012

Sealant PR1425B2 (#654 sem)

DAS
27
9-89

12/2016

Location

Loc Qty

Loc Code

cck017

12

m135135

4

m135407

8

**

①

~135600 pc

28
9-89

600.1013 Purchased No

100 Each

735.0000

5

5

600 1013

021200-3M TAPE PRIMER 94 PRIMER 24216

DAS
27
9-89

Location

Loc Qty

Loc Code

CCK095

735

m131145

735

6/15/2016

1

1

**

PC

28
9-89

646.2910 Manufactured No

100 Each

4.0000

1

1

646 2910

Deflector

DAS
27
9-89

Location

Loc Qty

Loc Code

CCK050

4

140993

4

**

PC

28
9-89

646.3001 Manufactured No

100 Each

1.0000

1

1

646 3001

Lower Cutter Assembly

DAS
27
9-89

Location

Loc Qty

Loc Code

cck018

1

142639

1

**

①

B149 325 pc

28
9-89

SEP 19 2016

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WORK ORDER NON-CONFORMANCE / UPDATE

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Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
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Work Order ID: 150671

150671

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 8/22/2016

Required Date: 8/29/2016

Start Qty: 1.00

Required Qty: 1.00

646.3110 Manufactured No

100 Each

16.0000

1

1

646 3110

Channel

DAS
27
9-89

Location

Loc Qty

Loc Code

cck020

16

141015

16

646.3210 Manufactured No

100 Each

11.0000

1

1

646 3210

Support

DAS
27
9-89

Location

Loc Qty

Loc Code

cck020

11

141064

1

142469

10

646.3301 Manufactured No

100 Each

5.0000

1

1

646 3301

Upper Cable Assy

DAS
27
9-89

Location

Loc Qty

Loc Code

cck018

5

148268

5

646.3510 Manufactured No

100 Each

18.0000

1

1

646 3510

Strut

DAS
27
9-89

Location

Loc Qty

Loc Code

cck104

7

140979

7

CCK108A

11

140979

11

PC

PC

PC

PC

28
9-89

28
9-89

28
9-89

28
9-89

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Description Work Order Deviation		Disposition			
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Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
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Work Order ID: 150671

150671

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 8/22/2016

Required Date: 8/29/2016

Start Qty: 1.00

Required Qty: 1.00

646.3511 Manufactured No

100

Each

17.0000

1

1

646 3511

Strut

**

PC 28 9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

cck104

8

141499

8

CCK108A

9

141499

9

646.3610 Manufactured No

100

Each

7.0000

1

1

646 3610

Filler

**

PC 28 9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

cck104

7

141103

7

646.3710 Manufactured No

100

Each

17.0000

1

1

646 3710

Doubler

**

PC 28 9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

CCK002

17

140753

17

646.3711 Manufactured No

100

Each

10.0000

1

1

646 3711

Clip

**

PC 28 9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

cck105

10

142632

10

SEP 19 2016

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Description Work Order Deviation		Disposition			
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				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
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Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>				Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																																
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OTHER : _____																																																																				

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Work Order ID: 150671

150671

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 8/22/2016

Required Date: 8/29/2016

Start Qty: 1.00

Required Qty: 1.00

646.3716	Manufactured	No	100	Each	28.0000	1	1	PC	28 9-89
646 3716									
Gauge Bracket									
DAS 27 9-89									
			<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>				
			cck105	28					
			140845	28					
646.3717	Manufactured	No	100	Each	15.0000	1	1	PC	28 9-89
646 3717									
Doubler									
DAS 27 9-89									
			<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>				
			cck105	15					
			142634	15					
646.3718	Manufactured	No	100	Each	9.0000	2	2	PC	28 9-89
646 3718									
Custom Washer									
DAS 27 9-89									
			<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>				
			cck105	9					
			140788	3					
			148306	6					
646.3719	Manufactured	No	100	Each	16.0000	2	2	PC	28 9-89
646 3719									
Doubler									
DAS 27 9-89									
			<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>				
			cck105	16					
			138311	5					
			148282	5					
			149309	6					

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No: _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation			Disposition		
			Completed By		
			Lead hand / Supervisor Approval Verification		
			QC / QA Coordinator Approval		
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐			FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐		
OTHER : _____					

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Work Order ID: 150671

150671

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 8/22/2016

Required Date: 8/29/2016

Start Qty: 1.00

Required Qty: 1.00

646.3810 Manufactured No

100 Each

14.0000

2

2

646 3810

Bracket

**

PC

DAS
27
9-89

Location

Loc Qty

Loc Code

cck105

14

141555

9

148559

5

2

646.3811 Manufactured No

100 Each

14.0000

1

1

646 3811

Radius Block

**

PC

DAS
27
9-89

Location

Loc Qty

Loc Code

CCK106

14

140895

4

148258

10

646.3812 Manufactured No

100 Each

5.0000

2

646 3812

Gusset Bracket

**

2

X B148240 PC

DAS
27
9-89

Location

Loc Qty

Loc Code

CCK106

5

140978

5

646.3813 Manufactured No

100 Each

9.0000

1

1

646 3813

Strut Bracket

**

PC

DAS
27
9-89

Location

Loc Qty

Loc Code

CCK106

9

141019

4

148269

5

SEP 19 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

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Misidentified ☐	☐ Past Due																																																																						
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Work Order ID: 150671

150671

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 8/22/2016

Required Date: 8/29/2016

Start Qty: 1.00

Required Qty: 1.00

646.3910 Manufactured No

100

Each

19.0000

4

4

646 3910

Shim

**

PC

28
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

CCK106

19

140772

19

646.3911 Manufactured No

100

Each

36.0000

1

1

646 3911

Shim

**

PC

28
9-89

Location

Loc Qty

Loc Code

cck104

16

126229

16

CCK106

20

126059

20

646.3912 Manufactured No

100

Each

26.0000

4

4

646 3912

Shim

**

PC

28
9-89

Location

Loc Qty

Loc Code

CCK106

26

140238

26

646.3913 Manufactured No

100

Each

76.0000

1

1

646 3913

Shim

**

PC

28
9-89

Location

Loc Qty

Loc Code

CCK106

76

126060

76

DAS
27
9-89

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
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Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐			FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐		
OTHER : ☐					

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Page 9

Work Order ID: 150671

150671

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 8/22/2016

Required Date: 8/29/2016

Start Qty: 1.00

Required Qty: 1.00

646.9410	Manufactured	No		100	Each	85.0000	1	1	
646 9410							**		PC 28 9-89
Shim									
DAS 27 9-89									
647.0112	Manufactured	No	Location	140671	Loc Qty	Loc Code			
647 0112			cck011		85				
Strut Bracket					85				
DAS 27 9-89									
647.7703	Manufactured	No			100	Each	28.0000	2	2
647 7703							**		013148232 PC 28 9-89
Strut Assembly									
DAS 27 9-89									
647.7703	Manufactured	No	Location	142661	Loc Qty	Loc Code			
647 7703			CCK107		28				
Strut Assembly					28				
DAS 27 9-89									
650.9201	Manufactured	No			100	Each	16.0000	2	2
650 9201							**		PC 28 9-89
Eyelet Bracket Assembly									
DAS 27 9-89									
650.9201	Manufactured	No	Location	144435	Loc Qty	Loc Code			
650 9201			CCK114		16				
Eyelet Bracket Assembly					4				
DAS 27 9-89					12				
650.9201	Manufactured	No		145013	100	Each	8.0000	2	2
650 9201							**		PC 28 9-89
Eyelet Bracket Assembly									
DAS 27 9-89									
650.9201	Manufactured	No	Location	141582	Loc Qty	Loc Code			
650 9201			cck127		8				
Eyelet Bracket Assembly					8				
DAS 27 9-89									

SEP 19 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>				Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																																			
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Work Order ID: 150671

150671

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 8/22/2016

Required Date: 8/29/2016

Start Qty: 1.00

Required Qty: 1.00

AN3-11A Purchased No 100 Each 179.0000 10 10

AN3-11A

Bolt

**

PC

28
9-89

DAS
27
9-89

Location Loc Qty Loc Code

over003 100

m135390 100

ST349 79

m134852 79

AN3-12A Purchased No 100 Each 32.0000 2 2

AN3-12A

Bolt

**

10
2

XM135603PC

28
9-89

DAS
27
9-89

Location Loc Qty Loc Code

ST349 32

m133064 16

m134257 16

AN3-13A Purchased No 100 Each 53.0000 1 1

AN3-13A

Bolt

**

PC

28
9-89

DAS
27
9-89

Location Loc Qty Loc Code

GA 20

m127070 20

ST349 33

m134365 33

AN316C4R Purchased No 100 Each 23.0000 2 2

AN316C4R

Nut, Jam

**

PC

28
9-89

DAS
27
9-89

Location Loc Qty Loc Code

ST331 23

m133234 21

m133523 2

2

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>				Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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OTHER : _____																					

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Work Order ID: 150671

150671

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 8/22/2016

Required Date: 8/29/2016

Start Qty: 1.00

Required Qty: 1.00

AN3-3A Purchased No 100 Each 196.0000 4 4
AN3-3A
 Bolt

**

PC

28
9-89

DAS
27
9-89

Location	Loc Qty	Loc Code
ST350	196	
m134738	24	
m135274	22	
m135408	50	
m135466	100	

AN3-4A Purchased No 100 Each 189.0000 10 10
AN3-4A
 Bolt

**

~~PC~~

28
9-89

DAS
27
9-89

Location	Loc Qty	Loc Code
ST350	189	
m134955	189	

AN3-5A Purchased No 100 Each 353.0000 2 2
AN3-5A
 Bolt

**

PC

28
9-89

DAS
27
9-89

Location	Loc Qty	Loc Code
FP001	157	
m133686	2	
m134502	155	
ST350	196	
m135058	196	

AN3-6A Purchased No 100 Each 207.0000 2 2
AN3-6A
 Bolt

**

PC

28
9-89

DAS
27
9-89

Location	Loc Qty	Loc Code
ST349	207	
M134955	207	

2

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>				Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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Large Fab ☐	Composite ☐	Supplier ☐																			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QS1042) Approval																	
Description Work Order Deviation		Disposition		Completed By																	
				Lead hand / Supervisor Approval Verification																	
				QC / QA Coordinator Approval																	
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OTHER : _____																					

Picklist Print

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Work Order ID: 150671

150671

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 8/22/2016

Required Date: 8/29/2016

Start Qty: 1.00

Required Qty: 1.00

AN44-5A Purchased No
AN44-5A
Eyebolt

100 Each 23.0000 2 2
**

PC 28 9-89

DAS
27
9-89

Location	Loc Qty	Loc Code
ST339	23	
m133990	2	
m134134	1	
m135127	20	

AN4C7A Purchased No
AN4C7A
BOLT

100 Each 54.0000 2 2
**

PC 28 9-89

DAS
27
9-89

Location	Loc Qty	Loc Code
OVER002	50	
m135470	50	
ST345	4	
m134861	4	

AN665-34R Purchased No
AN665-34R
Clevis

100 Each 7.0000 2 2
**

2 M135544 PC 28 9-89

DAS
27
9-89

Location	Loc Qty	Loc Code
ST330	7	
M135087	7	

CCR264SS3-02 Purchased No
CCR264SS3-02
Cherry Rivet

100 Each 227.0000 36 36
**

PC 28 9-89

DAS
27
9-89

Location	Loc Qty	Loc Code
ST321	227	
M134134	2	
M135127	225	

36

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>				Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																																			
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Work Order ID: 150671

150671

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 8/22/2016

Required Date: 8/29/2016

Start Qty: 1.00

Required Qty: 1.00

CR3213-5-3 Purchased No
CR3213-5-3
 Cherry Rivet

100 Each 134.0000

14

14

**

M134754 pc DAS 28 9-89

Location	Loc Qty	Loc Code
CCK003	100	
m135408	100	
ST319	34	
m134142	34	

MS20426AD5-7 Purchased No
MS20426AD5-7
 RIVET

100 Each 911.0000

2

2

**

PC DAS 28 9-89

Location	Loc Qty	Loc Code
ST311	911	
M133922	911	

MS20470AD5-5.5 Purchased No
MS20470AD5-5 5
 Rivet

100 Each 894.0000

8

8

**

PC DAS 28 9-89

Location	Loc Qty	Loc Code
ST309	894	
m134063	894	

MS20470AD5-6 Purchased No
MS20470AD5-6
 RIVET

100 Each 784.0000

8

8

**

PC DAS 28 9-89

Location	Loc Qty	Loc Code
ST309	784	
124089	784	

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐			
Design ☐	☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐			
Doc/Data ☐	☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐			
Equip/Tooling ☐	☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐			
Handling/Pre ☐	☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐			
Material ☐	☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐			
Internal Transport ☐	☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐			
Tribal Knowledge ☐	☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐			
LOA ☐	☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐			
Substation ☐	☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐			
Past Expiry Date ☐	☐	Manufacturing Process ☐	OTHER : _____						
Misidentified ☐	☐	Past Due ☐							

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Work Order ID: 150671

150671

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 8/22/2016

Required Date: 8/29/2016

Start Qty: 1.00

Required Qty: 1.00

MS20470AD5-7 Purchased No
MS20470AD5-7
 Rivet

100 Each 440.0000 3 3
 **

PC 28 9-89

Location Loc Qty Loc Code

ST309 440
 123425 440

MS21042-08 MS21042L08 Purchased No
MS21042-08
 USE MS21042L08

100 Each 33.0000 2 2
 **

2 X M135466 PC 28 9-89

Location Loc Qty Loc Code

ST304 25
 122815 25
 ST306 8
 m130388 8

MS21042-3 MS21042L3 Purchased No
MS21042-3
 Nut

100 Each 0.0000 2 2
 **

2 X 135407 PC 28 9-89

MS21042L3 MS21042L3 Purchased No
MS21042L3
 Nut

100 Each 1,509.000 61 61
 **

PC 28 9-89

Location Loc Qty Loc Code

FP001 14
 m133790 14
 GA 323
 m134360 112
 m135135 211
 ST303 1172
 m135135 572
 m135407 600

61

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																						
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																						
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																						
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Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval																		
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Root Cause		FAULT CATEGORY																							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐	OTHER : _____																			

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Work Order ID: 150671

150671

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 8/22/2016

Required Date: 8/29/2016

Start Qty: 1.00

Required Qty: 1.00

MS21042L4

Purchased

No

100

Each

2,081.000

2

2

MS21042L4

Nut

**

PC

28
9-89

Location

Loc Qty

Loc Code

FP001

51

m133363

51

GA

424

m133769

116

m135058

308

ST3003

25

m134955

25

ST303

1581

m133769

12

m134055

24

m135297

545

m135470

1000

DAS
27
9-89

MS21047-3

Purchased

No

100

Each

153.0000

18

18

MS21047-3

Nut Plate

**

PC

28
9-89

Location

Loc Qty

Loc Code

ST301

153

m134955

53

m135297

100

DAS
27
9-89

MS24693-C278

Purchased

No

100

Each

80.0000

5

5

MS24693-C278

Screw

**

PC

28
9-89

Location

Loc Qty

Loc Code

ST278

80

ST278 m135135

80

DAS
27
9-89

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
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OTHER : ☐					

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Work Order ID: 150671

150671

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 8/22/2016

Required Date: 8/29/2016

Start Qty: 1.00

Required Qty: 1.00

MS24694-S51 Purchased No
MS24694-S51
Screw

100 Each 264.0000 5 5

**

PC 28 9-89

Location Loc Qty Loc Code

ST284 264

m135442 264

100 Each 90.0000 2 2

**

PC 28 9-89

Location Loc Qty Loc Code

over006 50

m134851 50

ST284 40

m135274 40

100 Each 204.0000 3 3

**

PC 28 9-89

Location Loc Qty Loc Code

ST283 204

m134376 104

m135408 100

100 Each 142.0000 2 2

**

PC 28 9-89

Location Loc Qty Loc Code

ST278 142

124326 142

100 Each 142.0000 2 2

**

PC 28 9-89

SEP 10 2016

MS27039-08-13 Purchased No
MS27039-08-13
Screw

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____					

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Work Order ID: 150671

150671

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 8/22/2016

Required Date: 8/29/2016

Start Qty: 1.00

Required Qty: 1.00

MS27039-1-10

Purchased

No

100

Each

18.0000

MS27039-1-10
SCREW

**

2

2

AMBS603 PC 28 9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

GA

14

m129541

14

ST280

4

m134676

4

MS27039-1-12

Purchased

No

100

Each

53.0000

MS27039-1-12
Screw

**

6

6

PC 28 9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

ST280

53

m133988

3

m134294

50

MS27039-1-16

Purchased

No

100

Each

160.0000

MS27039-1-16
Screw

**

24

24

PC 28 9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

ST280

160

m134502

160

MS27039-1-19

Purchased

No

100

Each

153.0000

MS27039-1-19
Screw

**

22

22

24
MBS603 PC 28 9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

GA

82

m134134

82

ST280

71

m135058

71

SEP 19 2016

Monday, August 29, 2016 2:58:16 PM

Shop Packet Print

Page 17

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>				Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																																
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OTHER : _____																																																																				

Picklist Print

Monday, August 29, 2016 2:58:16 PM

Page 18

Work Order ID: 150671

150671

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 8/22/2016

Required Date: 8/29/2016

Start Qty: 1.00

Required Qty: 1.00

MS27039-1-20 Purchased

No

100

Each

105.0000

2

2

MS27039-1-20

Screw

**

PC 28 9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

ST280

105

124326

105

MS27039-1-21 Purchased

No

100

Each

265.0000

4

4

MS27039-1-21

Screw

**

PC 28 9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

ST280

265

m127904

265

NAS1149F0332P Purchased

No

100

Each

1,365.000

144

144

NAS1149F0332P

Washer

**

PC 28 9-89
X 135544

DAS
27
9-89

Location

Loc Qty

Loc Code

GA

282

m133709

282

ST262

1083

m135058

1083

NAS1149F0363P Purchased

No

100

Each

246.0000

2

2

NAS1149F0363P

WASHER

**

PC 28 9-89

Location

Loc Qty

Loc Code

ST262

246

124555

246

DAS
27
9-89

SEP 19 2016

Monday, August 29, 2016 2:58:16 PM

Shop Packet Print

Page 18

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation			Disposition		
			Completed By		
			Lead hand / Supervisor Approval Verification		
			QC / QA Coordinator Approval		
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐ Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐			FAULT CATEGORY Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐		
OTHER : _____					

Picklist Print

Monday, August 29, 2016 2:58:16 PM

Page 19

Work Order ID: 150671

150671

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 8/22/2016

Required Date: 8/29/2016

Start Qty: 1.00

Required Qty: 1.00

NAS1149F0432P Purchased

No

100

Each

847.0000

4

4

NAS1149F0432P

WASHER

**

PC

DAS
27
9-89

Location

Loc Qty

Loc Code

ST262

847

M134955

847

NAS1149FN832P Purchased

No

100

Each

1,732.000

4

4

NAS1149FN832P

Washer

**

4
4

X M135 603 PC

DAS
27
9-89

Location

Loc Qty

Loc Code

GA

1553

M133316

16

M133769

89

M135058

1448

ST263

179

M134257

179

SEP 19 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

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APICAL INDUSTRIES, INC.
dba DART AEROSPACE

ENGINEERING CHANGE NOTICE NO.		05304		SHEET 1 OF 1						
DWG NO.	646.4000	REV:	C	PREPARED BY	J. BECKER	DATE:	02/04/16	EFFECT ON DWG ☐ INC. ☒ UNINC.		
DWG TITLE: AS350 CABLE CUTTERS KIT										
APPROVED BY:		ENGR			MFG			QC		EFF. NEXT ORDER
TRANSACTION CODES (TC): A-ADD R-REVISE		REASON: REVISED F/N 12.								ECR: N/A

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 150671 MLC
16-08-30

SHEET 1, BOM IS:

12	R	601.1624	8	16	LOCKNUT	MS21042L3	
F/N	TC	PART NUMBER	4006	4005	DESCRIPTION	MATERIAL	SPECIFICATION
			QTY				
DOCUMENTS EFFECTED:					CHANGE CATEGORY	DER REVIEW REQUIRED	
☐ PATTERN ☐ MDL ☐ INSTALL INSTRUCTIONS ☐ ICA ☐ FMS ☒ BOM					☐ MAJOR ☒ MINOR	☐ YES ☒ NO	

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF APICAL INDUSTRIES DBA DART AEROSPACE. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE EXPRESS WRITTEN PERMISSION OF APICAL INDUSTRIES DBA DART AEROSPACE IS PROHIBITED.

NOTES:

1 AFTER INSTALLATION, APPLY F/N 54 A/R TO FILL GAPS AND FILLET EDGES.

2 INSTALL F/N 14 WITH F/N 52 & 53.

3 3M VHB ADHESIVE TAPE .025" THICK X .50" WIDE
VENDOR: MCMASTER-CARR P/N 75935A651.

4 3M TAPE PRIMER 94, APPLY TO BOTH SURFACES A/R BEFORE TAPE.
VENDOR: R.S. HUGHES P/N 021200-24216.

5 REUSE FASTENERS FROM F/N 1.

6 USE WASHERS A/R AS SHIMS TO OBTAIN BEST FITMENT.

7 AT CUSTOMERS OPTION, INSTALL F/N 65 BY MATCH DRILLING ON TO F/N 1.

8 INSTALL SHIM IF OEM PROVISIONS ARE INSTALLED ON AIRCRAFT. REMOVE SHIM LAYERS TO ACHIEVE CORRECT SIZE. MATCH DRILL HOLES. USE F/N 78 SCREW IN PLACE OF F/N 17 SCREW.

9 NEWER INSTALLATIONS ON AIRCRAFT WITH UPDATED CANOPY MAY REQUIRE DIFFERENT LENGTH SCREWS. USE F/N 62 TO REPLACE F/N 44 & F/N 26 IN PLACE OF F/N 41 WHEN NECESSARY.

UNINCORPORATED ECN(s)

05304

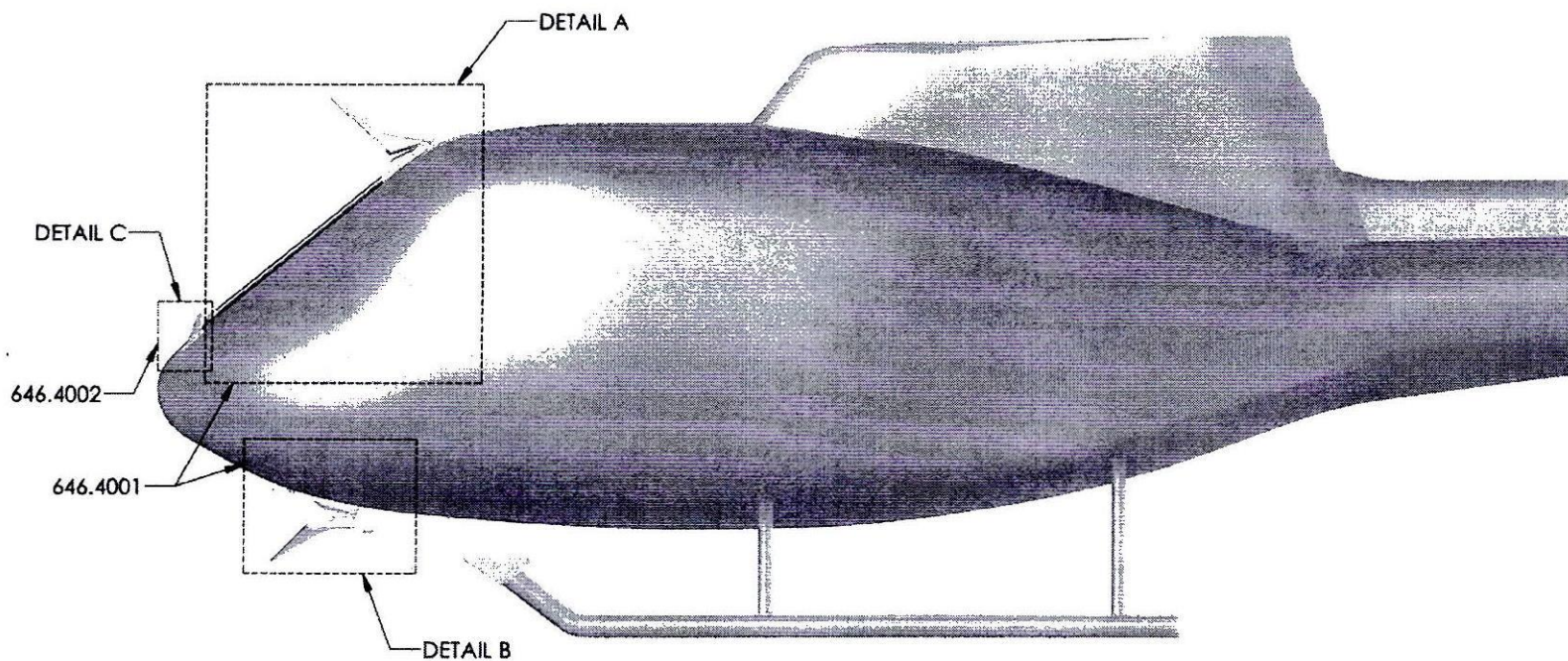
5	5	5	78	601.3875	SCREW					
1	1	1	77	646.9410	SHIM					
	4	4	76	601.2764	WASHER	NAS1149P482P				
	2	2	75	601.2973	LOCKNUT	MS27042-08				
	2	2	74	601.2988	SCREW	MS27039-0813				
	2	2	73	601.2943	LOCKNUT	MS27042-3				
	2	2	72	601.3128	NUT	AN311C4B				
	2	2	71	601.3209	LOCKNUT	MS27042-4				
	4	4	70	601.2638	WASHER	NAS1149P432P				
	2	2	69	601.2669	BOLT	ANMC7A				
	2	2	68	601.3119	CLEVIS	AN6A5-3AR				
	2	2	67	601.3121	EYE BOLT	AN6A-5A				
	2	2	66	650.9201	EYE BRACKET ASSY					
REF	REF	REF	65	647.5701	GPS MOUNT KIT					
		2	64	601.3151	WASHER	NAS1149P03A3P				
		2	63	601.2911	SCREW	MS246P653				
	24	24	62	601.2637	SCREW	MS27039-1-16				
2	2	2	61	601.2763	BOLT	AN3-12A				
	1	1	60	646.3913	SHIM					
	4	4	59	646.3912	SHIM					
	1	1	58	646.3911	SHIM					
	4	4	57	646.3910	SHIM					
	5	5	56	600.1013	PRIMER					
8 FT	8 FT	8 FT	55	600.0129	VHB TAPE					
	1	1	54	600.1012	SEALANT	PG-1425 CL-133 B				
	1	1	53	600.0991	MAGNEBOND 6398 PART B					
	1	1	52	600.0990	MAGNEBOND 6398 PART A					
6	10	10	51	601.2826	BOLT	AN3-11A				
		2	50	646.3814	WIPER BRACKET					
		2	49	601.2910	SCREW	MS27039-1-16				
2		2	48	601.1365	SCREW	MS27039-1-1D				
2		2	47	646.3719	DOUBLER					
	2	2	46	646.3718	CUSTOM WASHER					
1		1	45	646.3717	DOUBLER					
	22	2	44	601.1948	SCREW	MS27039-1-1F				
	2	2	43	601.1952	SCREW	MS27039-1-2C				
	4	4	42	601.1956	SCREW	MS27039-1-21				
4006	4003	4004	4003	4002	4001	FIND #	PART #	DESCRIPTION	MATL	SPEC.

REV	DESCRIPTION	DATE	APPROVED
A	INCORPORATED ECN 05304, 05305, 05306 & 05307	02/06/2018	P. BRAYO
B	INCORPORATED ECN 05308, 05309 & 05310	11/04/2018	P. BRAYO
C	INCORPORATED ECN 05311	09/09/2018	P. BRAYO

			2		2	41	601.2829	SCREW	MS27039-1-1/2	
			2		2	40	601.2831	RIVET	MS27042AD3-7	
			1		1	39	646.3716	GAUGE BRACKET		
			6		6	38	601.1953	SCREW	MS27039-1-1/2	
		2			2	37	646.3715	STRUT DOUBLER		
	2		2		2	36	601.2824	BOLT	AN3-5A	
12	36				36	35	601.2277	RIVET	CC160483-9 CI	
6	18				18	34	600.0795	NUTPLATE	MS2-1047-5	
3	3				3	33	601.2565	RIVET	MS20470AD3-7	
1	1				1	32	646.3813	STRUT BRACKET		
4	4				4	31	601.2822	BOLT	AN3-3A	
2	2				2	30	646.3812	GUSSET BRACKET		
8	8				8	29	601.2564	RIVET	MS20470AD3-6	
1	1				1	28	646.3714	GUSSET		
	1	1			1	27	646.3610	FILLER		
	3	3			3	26	601.2830	SCREW	MS27040F554	
	2	2			2	25	601.2825	BOLT	AN3-6A	
	1	1			1	24	646.3811	RADIUS BLOCK		
	1	1			1	23	646.3712	CLIP		
	1	1			1	22	646.3711	CLIP		
	8	8			8	21	601.2832	RIVET	MS2040AD3-6-6	
14	14				14	20	601.2020	RIVET	CR3213-3-3	
4	6	4	6		10	19	601.2823	BOLT	AN3-4A	
	1	1	1		1	18	601.2827	BOLT	AN3-13A	
	5	5			5	17	601.2912	SCREW	MS2469-4501	
1	1				1	16	646.3713	GUSSET		
1	1				1	15	646.3210	SUPPORT		
	1	1			1	14	646.3710	DOUBLER		
	1	1	1		1	13	646.3110	CHANNEL		
14	10	8	53	6	61	12	601.1624	LOCKNUT	MS21042-3	
16	32	18	120	16	144	11	601.1607	WASHER	NAS1164T0202P	
						10	646.3410	LH WIPER DEFLECTOR		
						9	646.3411	RH WIPER DEFLECTOR		
			2		2	8	647.7703	STRUT ASSY		
			2		2	7	647.0112	STRUT BRACKET		
	1	1			1	6	646.3511	STRUT		
	1	1	1		1	5	646.3510	STRUT		
2		2			2	4	646.3810	BRACKET		
			1		1	3	646.2910	DEFLECTOR		
	1		1		1	2	646.3001	LOWER CUTTER ASSY		
			1		1	1	646.3301	UPPER CUTTER ASSY		
X							646.4006	LOWER CUTTER FORK		
	X						646.4005	LOWER CUTTER REMOVABLE PROVISIONS		
		X					646.4004	FIXED PROVISIONS KIT		
			X				646.4003	CABLE CUTTERS KIT WITHOUT FIXED PROVISIONS		
				X			646.4002	AS350 WIPER DEFLECTOR KIT		
					X		646.4001	AS350 CABLE CUTTERS KIT		
4006	4005	4004	4003	4002	4001	FIND #	PART #	DESCRIPTION	MATL	SPEC.

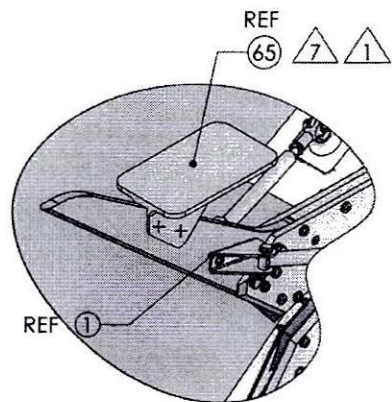
GTY		PARTS LIST	
NEXT ASSY (S)		DART AEROSPACE APICAL INDUSTRIES INC. 1700 DART AVENUE 3030 ENTERPRISE CT., SUITE A VISTA, CA 92081 (760)-724-5300	
DATE: 08-27-08 DRAWN BY: J. R. RYAN CHECKED BY: P. BRAYO DRAWING APPROVAL: P. BRAYO DATE: 08-27-08 UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS DECIMALS MILLIMETERS ANGLES ± 1°		AS350 CABLE CUTTERS KIT REV C SCALE: NONE SHEET 1 OF 5	

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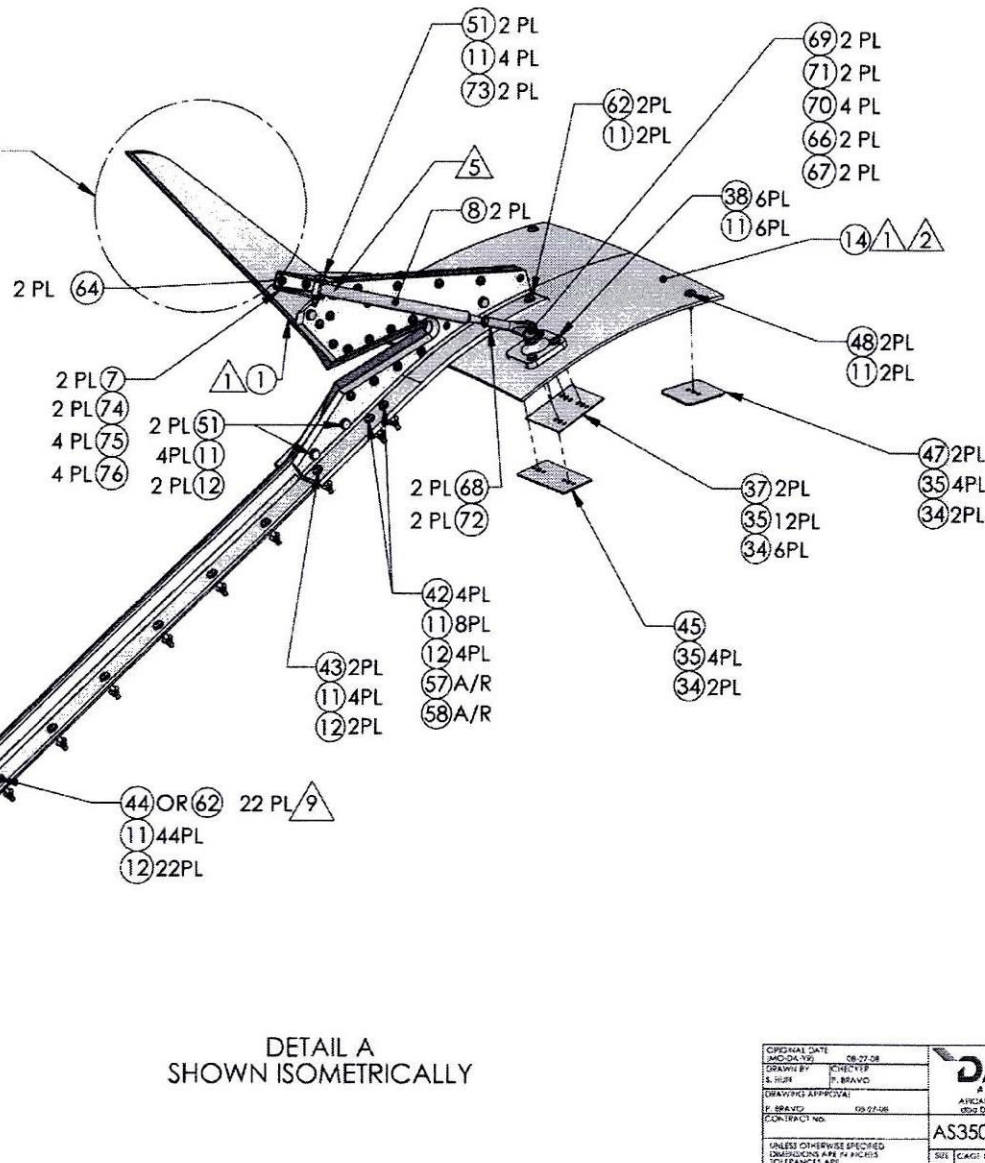
ORIGINAL DATE 08-27-09		3030 ENTERPRISE CT., SUITE A, YOTA, CA. 92081 (760)-724-5330	
DRAWN BY S. HUBB		DART AEROSPACE APICAL INDUSTRIES INC. DBA DART AEROSPACE	
DRAWING APPROVAL P. BRADY 08-27-09		AS350 CABLE CUTTERS KIT	
CONTRACT NO.		REV C	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE 2 PLACE DECIMALS ±0.10 3 PLACE DECIMALS ±0.005 ANGLES ± 3°		SCALE NONE	
SHEET B	DWG. NO. 07M26 646.4000	SHEET 2 OF 5	

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DETAIL D
TYPICAL GPS MOUNT KIT INSTALLATION

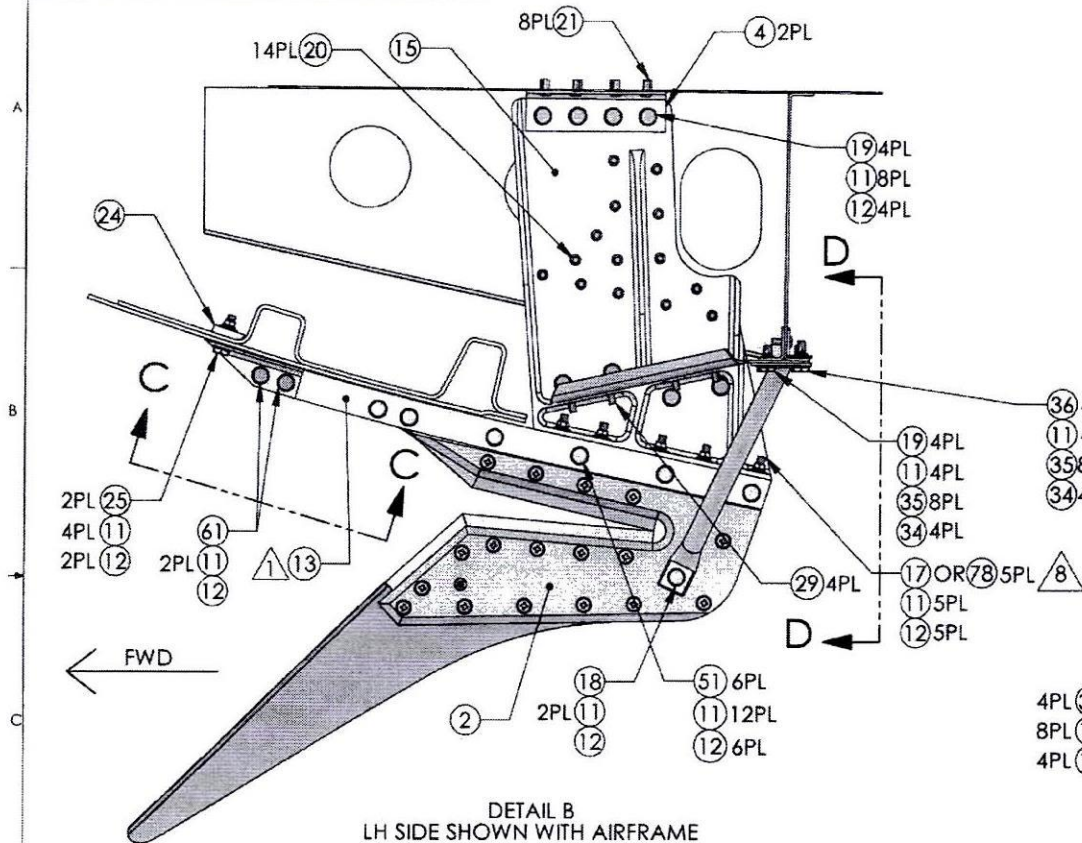
DETAIL D



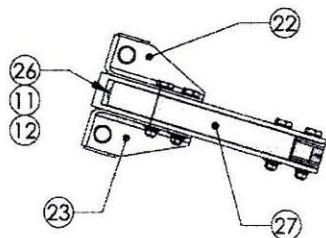
DETAIL A
SHOWN ISOMETRICALLY

ORIGINAL DATE (MO-DA-YR) 08-27-08		3030 ENTERPRISE CT. SUITE A VISTA, CA 92081 (760)-724-5300	
DRAWN BY S. HUGH		DART AEROSPACE APICAL INDUSTRIES INC. DSO DART AEROSPACE	
DRAWINGS APPROVAL P. BRAVO		AS350 CABLE CUTTERS KIT	
CONTRACT NO.		SER B	REV C
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005 ANGLES ±.1°		SCALE NONE	
CAGE CODE D7M26		DWG. NO. 646 4000	
SHEET 3 OF 5		SHEET 3 OF 5	

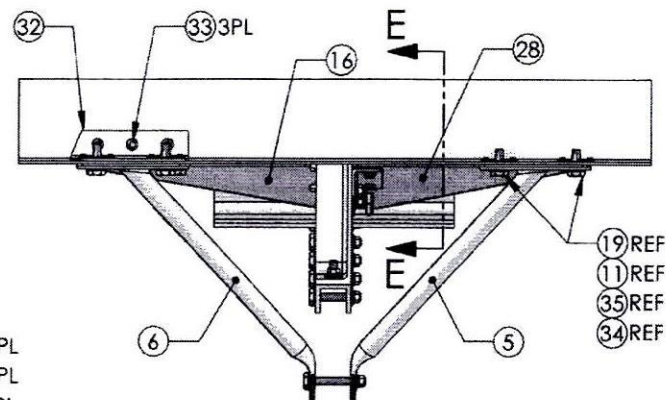
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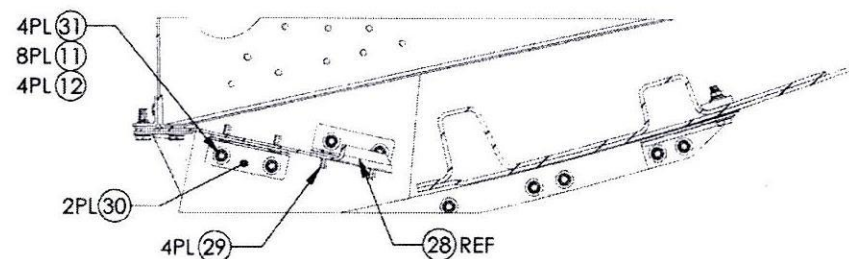
DETAIL B
 LH SIDE SHOWN WITH AIRFRAME



SECTION C-C



SECTION D-D
 CUTTER HIDDEN FOR CLARITY



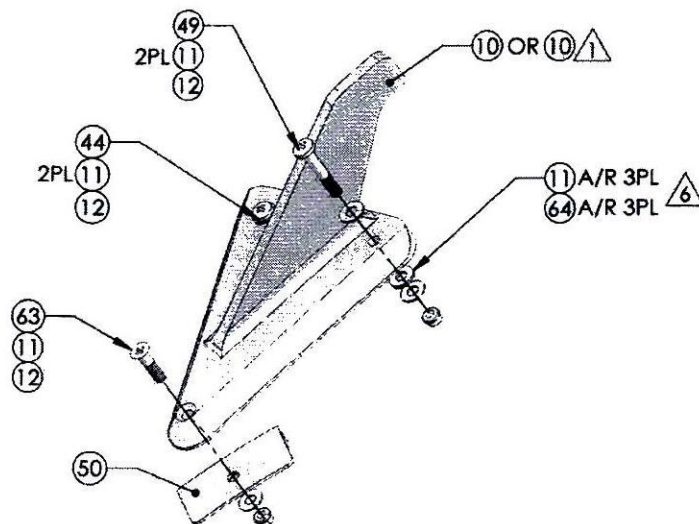
SECTION E-E

ORIGINAL DATE 8/20/2011		DESIGN 01-270N		
DRAWN BY T. HUFF		CHECKED P. SHAW		
DRAWING APPROVAL P. SHAW		APICAL INDUSTRIES INC. DBA DART AEROSPACE		
CONTRACT NO.				
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 3 PLACE DECIMALS ± 0.010 2 PLACE DECIMALS ± 0.005 ANGLES ± 1°				
REV B		DATE 07/13/16	DWG. NO. 646.4000	REV C
SCALE NONE		SHEET 4 OF 5		

DART 3030 ENTERPRISE CT.,
 AEROSPACE SUITE A
 VISTA, CA 92081
 (760) 774-5300

AS350 CABLE CUTTERS KIT

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WRITTEN PERMISSION OF APICAL INDUSTRIES D&A DART AEROSPACE IS PROHIBITED.



DETAIL C
LH SHOWN EXPLODED
RH OPPOSITE

ORIGINAL DATE JMC-DA 181 08-27-08		DART 3030 ENTERPRISE CT., SUITE A VISTA, CA 92081 (760)-724-5300 APICAL INDUSTRIES INC. D&A DART AEROSPACE	
DRAWN BY V. HEN P. HEN VO			
DRAWING APPROVAL P. HEN VO		AS350 CABLE CUTTERS KIT SIZE 1" ALUM CORD DRWG. NO. 646.4000 B 07M26 C SCALE NONE SHEET 5 OF 5	
DESIGNER CONTRACT NO.			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE 2 PLACE DECIMALS DEC TO 3 PLACE DECIMALS DEC TO ANGLES 5° 5'			

Work Order ID 150671***150671***

Page 1

Monday, August 29, 2016 2:58:17 PM

Item ID: 646.4001

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: AS350 Cable Cutter System

Start Date: 8/22/2016 Start Qty: 1.00

1

Cust Item ID:

Required Date: 8/29/2016 Req'd Qty: 1.00

1

Customer:

Reference:

Run Start ***NR1***Approvals: Process Plan: DAS Date: AUG 30 2016

Tooling:

Date:

Stop ***NR2***QC: DAS

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

Draw Nbr

Revision Nbr

646.4000

C1

DAS
8
9-88**SEP 13 2016**

100

Document Control

0.00

DAS
21
9-89

SEP 14 2016

100

DOCUMENT CONTROL

DC

Memo

0.00

Doc.Control -USB or Paperwork

Photocopy bluefile & type labels per PPP 646.4001

110

Pick Kit

0.00

110

Packaging

Memo

0.00

Packaging

120

QC4- 100% Inspect kits for completeness

0.00

120

QC

Memo

0.00

Quality Control

NOTES:

2 INSTALL F/N 14 WITH F/N 52 & 53.

4 3M TAPE PRIMER 94. APPLY TO BOTH SURFACES A/R BEFORE TAPE
VENDOR: R.S. HUGHES P/N 021200-24216.

5 REUSE FASTENERS FROM 1/8 IN.

△ USE WASHERS A/R AS SHIMS TO OBTAIN BEST FITMENT.

2. AT CUSTOMERS OPTION, INSTALL F/N 65 BY MATCH DRESSING ON TO F/N 1

A INSTALL SHIM IF OEM PROVISIONS ARE INSTALLED ON AIRCRAFT. REMOVE SHIM LAYERS TO ACHIEVE CORRECT SIZE. MATCH DRILL HOLES. USE F/N 78 SCREW IN PLACE OF F/N 12 SCREW.

 NEWER INSTALLATIONS ON AIRCRAFT WITH UPDATED CANOPY MAY REQUIRE DIFFERENT LENGTH SCREWS. USE F/N 62 TO REPLACE F/N 44 & F/N 26 IN PLACE OF F/N 41 WHEN NECESSARY.

REFERENCE ONLY

UNINCORPORATED ECN(s)

05304

[illegible]

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
1	INCORPORATED COMMENTS FROM 10/11/10	10/11/10	F. BRADY
2	INCORPORATED COMMENTS FROM 10/11/10	10/11/10	F. BRADY
3	INCORPORATED COMMENTS FROM 10/11/10	10/11/10	F. BRADY

					2	2	41	601.2829	SCREW	M524574554		
					2	2	40	601.2831	RIVET	M52D33AADS-7		
					1	1	39	646.3716	GAUGE BRACKET			
					6	6	38	601.1953	SCREW	M52P23F-1-2		
				2		2	37	646.3715	STRUT DOUBLER			
				2		2	36	601.2824	BOLT	A13-5A		
				2	36	36	35	601.2277	RIVET	CCKRMB 3-10		
				6	18	18	34	600.0795	NUTPLATE	M52P1647-3		
				3	3	3	33	601.2565	RIVET	M52D47ADS-7		
				1	1	1	32	646.3813	STRUT BRACKET			
				4	4	4	31	601.2822	BOLT	A13-3A		
				2	2	2	30	646.3812	GUSSET BRACKET			
				6	8	8	29	601.2564	RIVET	M52D47ADS-6		
				1	1	1	28	646.3714	GUSSET			
				1	1	1	27	646.3610	FILLER			
				3	3	3	26	601.2830	SCREW	M524574554		
				2	2	2	25	601.2825	BOLT	A13-6A		
				1	1	1	24	646.3811	RADIUS BLOCK			
				1	1	1	23	646.3712	CLIP			
				1	1	1	22	646.3711	CLIP			
				8	8	8	21	601.2832	RIVET	M52D47ADS-5		
				14	14	14	20	601.2020	RIVET	DF3213-5-3		
				4	6	4	6	10	19	601.2823	BOLT	A13-4A
				1	1	1	18	601.2827	BOLT	A13Q-13A		
				5	5	5	17	601.2912	SCREW	M524574554		
				1	1	1	16	646.3713	GUSSET			
				1	1	1	15	646.3210	SUPPORT			
				1	1	1	14	646.3710	DOUBLER			
				1	1	1	13	646.3110	CHANNEL			
				14	10	8	53	61	12	601.1624	LOCKNUT	M5210AGL-3
				16	32	18	120	144	11	601.1607	WASHER	M5210AGL-2
							10	646.3410	LH WIFER DEFLECTION			
							9	646.3411	RH WIFER DEFLECTION			
						2	2	8	647.7703	STRUT ASSY		
						2	2	7	647.0112	STRUT BRACKET		
						1	1	6	646.3511	STRUT		
						1	1	5	646.3510	STRUT		
				2	2	2	4	646.3810	BRACKET			
						1	1	3	646.2910	DEFLECTOR		
						1	1	2	646.3001	LOWER CUTTER ASSY		
						1	1	1	646.3301	UPPER CUTTER ASSY		
X									646.4006	LOWER CUTTER TUBED PROVISION KIT		
	X								646.4005	LOWER CUTTER REMOVABLE PROVISIONS		
		X							646.4004	FIXED PROVISIONS KIT		
			X						646.4003	CABLE CUTTERS KIT WITHOUT FINGER PROTECTOR		
				X					646.4002	A1350 WIFER DEFLECTOR KIT		
					X				646.4001	A1350 CABLE CUTTING KIT		
#006	#002	A13A	#003	#002	#001	FINC #	PART #	DESCRIPTION	MAT.	SPEC.		

GLY	PARIS LST			
NEXT ASSY (S)	ORDERING DATE ORDER NO S HUF S PRNO ORDERING APPROVAL ORDER NO ORDERING PRG	DART AIRSPACE AFCA ACQUISITION 100 DART AIRSPACE	3030 ENTERPRISE C1 SUITE A VISTA, C.A. 92081 (760)-724-5300	
	1. CHECK CURRENT SPECIFICATIONS 2. CHECK CURRENT SPECIFICATIONS 3. CHECK CURRENT SPECIFICATIONS 4. CHECK CURRENT SPECIFICATIONS 5. CHECK CURRENT SPECIFICATIONS 6. CHECK CURRENT SPECIFICATIONS 7. CHECK CURRENT SPECIFICATIONS 8. CHECK CURRENT SPECIFICATIONS	8	805 6-00000000 6 07426 646.4000 S.P.L.F. NO. 1-4000	805 6-00000000 6 07426 646.4000 S.P.L.F. NO. 1-4000